

Terrestrial Animal Health Standards Commission Report  
May 2008 General Session

CHAPTER 2.3.13.

**BOVINE SPONGIFORM ENCEPHALOPATHY**

---

Article 2.3.13.1.

The recommendations in this Chapter are intended to manage the human and animal health risks associated with the presence of the bovine spongiform encephalopathy (BSE) agent in cattle (*Bos taurus* and *B. indicus*) only.

1. When authorising import or transit of the following commodities and any products made from these commodities and containing no other tissues from cattle, Veterinary Authorities should not require any BSE related conditions, regardless of the BSE risk status of the cattle population of the exporting country, zone or compartment:
  - a. milk and milk products;
  - b. semen and *in vivo* derived cattle embryos collected and handled in accordance with the recommendations of the International Embryo Transfer Society;
  - c. hides and skins;
  - d. gelatine and collagen prepared exclusively from hides and skins;
  - e. protein-free tallow (maximum level of insoluble impurities of 0.15% in weight) and derivatives made from this tallow;
  - f. dicalcium phosphate (with no trace of protein or fat);
  - g. deboned skeletal muscle meat (excluding mechanically separated meat) from cattle 30 months of age or less, which were not subjected to a stunning process prior to slaughter, with a device injecting compressed air or gas into the cranial cavity or to a pithing process, and which passed ante-mortem and post-mortem inspections and which has been prepared in a manner to avoid contamination with tissues listed in Article 2.3.13.14.;
  - h. blood and blood by-products, from cattle which were not subjected to a stunning process, prior to slaughter, with a device injecting compressed air or gas into the cranial cavity, or to a pithing process.
2. When authorising import or transit of other commodities listed in this Chapter, Veterinary Authorities should require the conditions prescribed in this Chapter relevant to the BSE risk status of the cattle population of the exporting country, zone or compartment.

Standards for diagnostic tests are described in the Terrestrial Manual.

Article 2.3.13.2.

The BSE risk status of the cattle population of a country, zone or compartment should be determined on the basis of the following criteria:

1. the outcome of a risk assessment, based on Section 1.3., identifying all potential factors for BSE occurrence and their historic perspective. Countries should review the risk assessment annually to determine whether the situation has changed.
  - a. Release assessment

Release assessment consists of assessing, through consideration of the following, the likelihood that the BSE agent has either been introduced into the country, zone or compartment via commodities potentially contaminated with it, or is already present in the country, zone or compartment:

- i. the presence or absence of the BSE agent in the indigenous ruminant population of the country, zone or compartment and, if present, evidence regarding its prevalence;
- ii. production of meat-and-bone meal or greaves from the indigenous ruminant population;
- iii. imported meat-and-bone meal or greaves;
- iv. imported cattle, sheep and goats;
- v. imported animal feed and feed ingredients;
- vi. imported products of ruminant origin for human consumption, which may have contained tissues listed in Article 2.3.13.13, and may have been fed to cattle;
- vii. imported products of ruminant origin intended for *in vivo* use in cattle.

The results of any epidemiological investigation into the disposition of the commodities identified above should be taken into account in carrying out the assessment.

b. Exposure assessment

If the release assessment identifies a risk factor, an exposure assessment should be conducted, consisting of assessing the likelihood of cattle being exposed to the BSE agent, through a consideration of the following:

- i. recycling and amplification of the BSE agent through consumption by cattle of meat-and-bone meal or greaves of ruminant origin, or other feed or feed ingredients contaminated with these;
  - ii. the use of ruminant carcasses (including from fallen stock), by-products and slaughterhouse waste, the parameters of the rendering processes and the methods of animal feed manufacture;
  - iii. the feeding or not of ruminants with meat-and-bone meal and greaves derived from ruminants, including measures to prevent cross-contamination of animal feed;
  - iv. the level of surveillance for BSE conducted on the cattle population up to that time and the results of that surveillance;
2. on-going awareness programme for veterinarians, farmers, and workers involved in transportation, marketing and slaughter of cattle to encourage reporting of all cases showing clinical signs consistent with BSE in target sub-populations as defined in Appendix 3.8.4.;
  3. the compulsory notification and investigation of all cattle showing clinical signs consistent with BSE;
  4. the examination carried out in accordance with the Terrestrial Manual in an approved laboratory of brain or other tissues collected within the framework of the aforementioned surveillance and monitoring system.

When the risk assessment demonstrates negligible risk, the country should conduct Type B surveillance in accordance with Appendix 3.8.4.

When the risk assessment fails to demonstrate negligible risk, the country should conduct Type A surveillance in accordance with Appendix 3.8.4.

Article 2.3.13.3.

**Negligible BSE risk**

Commodities from the cattle population of a country, zone or compartment pose a negligible risk of transmitting the BSE agent if the following conditions are met:

1. a risk assessment, as described in point 1 of Article 2.3.13.2., has been conducted in order to identify the historical and existing risk factors, and the country has demonstrated that appropriate specific measures have been taken for the relevant period of time defined below to manage each identified risk;
2. the country has demonstrated that Type B surveillance in accordance with Appendix 3.8.4. is in place and the relevant points target, in accordance with Table 1, has been met;
3. EITHER:
  - a. there has been no case of BSE or, if there has been a case, every case of BSE has been demonstrated to have been imported and has been completely destroyed, and
    - i. the criteria in points 2 to 4 of Article 2.3.13.2. have been complied with for at least 7 years; and
    - ii. it has been demonstrated through an appropriate level of control and audit that for at least 8 years neither meat-and-bone meal nor greaves derived from ruminants has been fed to ruminants;

OR

- b. if there has been an indigenous case, every indigenous case was born more than 11 years ago; and
  - i. the criteria in points 2 to 4 of Article 2.3.13.2. have been complied with for at least 7 years; and
  - ii. it has been demonstrated through an appropriate level of control and audit that for at least 8 years neither meat-and-bone meal nor greaves derived from ruminants has been fed to ruminants; and
  - iii. all BSE cases, as well as:
    - all cattle which, during their first year of life, were reared with the BSE cases during their first year of life, and which investigation showed consumed the same potentially contaminated feed during that period, or
    - if the results of the investigation are inconclusive, all cattle born in the same herd as, and within 12 months of the birth of, the BSE cases,

if alive in the country, zone or compartment, are permanently identified, and their movements controlled, and, when slaughtered or at death, are completely destroyed.

Article 2.3.13.4.

**Controlled BSE risk**

Commodities from the cattle population of a country, zone or compartment pose a controlled risk of transmitting the BSE agent if the following conditions are met:

1. a risk assessment, as described in point 1 of Article 2.3.13.2., has been conducted in order to identify the historical and existing risk factors, and the country has demonstrated that appropriate measures are being taken to manage all identified risks, but these measures have not been taken for the relevant period of time;
2. the country has demonstrated that Type A surveillance in accordance with Appendix 3.8.4. has been carried out and the relevant points target, in accordance with Table 1, has been met; Type B surveillance may replace Type A surveillance once the relevant points target is met;
3. EITHER:
  - a. there has been no case of BSE or, if there has been a case, every case of BSE has been demonstrated to have been imported and has been completely destroyed, the criteria in points 2 to 4 of Article 2.3.13.2. are complied with, and it can be demonstrated through an appropriate level of control and audit that neither meat-and-bone meal nor greaves derived from ruminants has been fed to ruminants, but at least one of the following two conditions applies:
    - i. the criteria in points 2 to 4 of Article 2.3.13.2. have not been complied with for 7 years;
    - ii. it cannot be demonstrated that controls over the feeding of meat-and-bone meal or greaves derived from ruminants to ruminants have been in place for 8 years;

OR

- b. there has been an indigenous case of BSE, the criteria in points 2 to 4 of Article 2.3.13.2. are complied with, and it can be demonstrated through an appropriate level of control and audit that neither meat-and-bone meal nor greaves derived from ruminants has been fed to ruminants, but at least one of the following two conditions applies:
      - i. the criteria in points 2 to 4 of Article 2.3.13.2. have not been complied with for 7 years;
      - ii. it cannot be demonstrated that controls over the feeding of meat-and-bone meal and greaves derived from ruminants to ruminants have been in place for 8 years;

AND

- iii. all BSE cases, as well as:
        - all cattle which, during their first year of life, were reared with the BSE cases during their first year of life, and which investigation showed consumed the same potentially contaminated feed during that period, or
        - if the results of the investigation are inconclusive, all cattle born in the same herd as, and within 12 months of the birth of, the BSE cases,

if alive in the country, zone or compartment, are permanently identified, and their movements controlled, and, when slaughtered or at death, are completely destroyed.

Article 2.3.13.5.

**Undetermined BSE risk**

The cattle population of a country, zone or compartment poses an undetermined BSE risk if it cannot be demonstrated that it meets the requirements of another category.

Article 2.3.13.6.

When importing from a country, zone or compartment posing a negligible BSE risk, Veterinary Authorities should require:

for all commodities from cattle not listed in point 1 of Article 2.3.13.1.

the presentation of an international veterinary certificate attesting that the country, zone or compartment complies with the conditions in Article 2.3.13.3.

Article 2.3.13.7.

When importing from a country, zone or compartment posing a negligible BSE risk, Veterinary Authorities should require:

for cattle selected for export

the presentation of an international veterinary certificate attesting that the animals:

1. are identified by a permanent identification system in such a way as to demonstrate that they are not exposed cattle as described in point 3)b)iii) of Article 2.3.13.3.;
2. were born after the date from which the ban on the feeding of ruminants with meat-and-bone meal and greaves derived from ruminants had been effectively enforced.

Article 2.3.13.8.

When importing from a country, zone or compartment posing a controlled BSE risk, Veterinary Authorities should require:

for cattle

the presentation of an international veterinary certificate attesting that:

1. the country, zone or compartment complies with the conditions referred to in Article 2.3.13.4.;
2. cattle selected for export are identified by a permanent identification system in such a way as to demonstrate that they are not exposed cattle as described in point 3b)iii) of Article 2.3.13.4.;
3. cattle selected for export were born after the date from which the ban on the feeding of ruminants with meat-and-bone meal and greaves derived from ruminants was effectively enforced.

Article 2.3.13.9.

When importing from a country, zone or compartment with an undetermined BSE risk, Veterinary Authorities should require:

for cattle

the presentation of an international veterinary certificate attesting that:

1. the feeding of ruminants with meat-and-bone meal and greaves derived from ruminants has been banned and the ban has been effectively enforced;
2. all BSE cases, as well as:
  - a. all cattle which, during their first year of life, were reared with the BSE cases during their first year of life, and, which investigation showed consumed the same potentially contaminated feed during that period, or
  - b. if the results of the investigation are inconclusive, all cattle born in the same herd as, and within 12 months of the birth of, the BSE cases,

if alive in the country, zone or compartment, are permanently identified, and their movements controlled, and, when slaughtered or at death, are completely destroyed;

3. cattle selected for export:
  - a. are identified by a permanent identification system in such a way as to demonstrate that they are not exposed cattle as demonstrated in point 2 above;
  - b. were born at least 2 years after the date from which the ban on the feeding of ruminants with meat-and-bone meal and greaves derived from ruminants was effectively enforced.

Article 2.3.13.10.

When importing from a country, zone or compartment posing a negligible BSE risk, Veterinary Authorities should require:

for fresh meat and meat products from cattle (other than those listed in point 1 of Article 2.3.13.1.)

the presentation of an international veterinary certificate attesting that:

1. the country, zone or compartment complies with the conditions in Article 2.3.13.3.;
2. the cattle from which the fresh meat and meat products were derived passed ante-mortem and post-mortem inspections;
3. in countries with negligible BSE risk where there have been indigenous cases, the cattle from which the fresh meat and meat products were derived were born after the date from which the ban on the feeding of ruminants with meat-and-bone meal and greaves derived from ruminants had been effectively enforced.

Article 2.3.13.11.

When importing from a country, zone or compartment with an controlled BSE risk, Veterinary Authorities should require:

for fresh meat and meat products from cattle (other than those listed in point 1 of Article 2.3.13.1.)

the presentation of an international veterinary certificate attesting that:

1. the country, zone or compartment complies with the conditions referred to in Article 2.3.13.4.;
2. the cattle from which the fresh meat and meat products were derived passed ante-mortem and post-mortem inspections;
3. cattle from which the fresh meat and meat products destined for export were derived were not subjected to a stunning process, prior to slaughter, with a device injecting compressed air or gas into the cranial cavity, or to a pithing process;
4. the fresh meat and meat products were produced and handled in a manner which ensures that such products do not contain and are not contaminated with:
  - a. the tissues listed in points 1 and 2 of Article 2.3.13.14.,
  - b. mechanically separated meat from the skull and vertebral column from cattle over 30 months of age.

Article 2.3.13.12.

When importing from a country, zone or compartment with an undetermined BSE risk, Veterinary Authorities should require:

for fresh meat and meat products from cattle (other than those listed in point 1 of Article 2.3.13.1.)

the presentation of an international veterinary certificate attesting that:

1. the cattle from which the fresh meat and meat products originate:
  - a. have not been fed meat-and-bone meal or greaves derived from ruminants;
  - b. passed ante-mortem and post-mortem inspections;
  - c. were not subjected to a stunning process, prior to slaughter, with a device injecting compressed air or gas into the cranial cavity, or to a pithing process;
2. the fresh meat and meat products were produced and handled in a manner which ensures that such products do not contain and are not contaminated with:
  - a. the tissues listed in points 1 and 3 of Article 2.3.13.14.,
  - b. nervous and lymphatic tissues exposed during the deboning process,
  - c. mechanically separated meat from the skull and vertebral column from cattle over 12 months of age.

Article 2.3.13.13.

1. Ruminant-derived meat-and-bone meal or greaves, or any commodities containing such products, which originate from a country, zone or compartment defined in Article 2.3.13.3., but where there has been an indigenous case of BSE, should not be traded if such products were derived from cattle born before the date from which the ban on the feeding of ruminants with meat-and-bone meal and greaves derived from ruminants had been effectively enforced.
2. Ruminant-derived meat-and-bone meal or greaves, or any commodities containing such products, which originate from a country, zone or compartment defined in Articles 2.3.13.4. and 2.3.13.5. should not be traded between countries.

Article 2.3.13.14.

1. From cattle of any age originating from a country, zone or compartment

defined in Articles 2.3.13.4. and 2.3.13.5., the following commodities, and any commodity contaminated by them, should not be traded for the preparation of food, feed, fertilisers, cosmetics, pharmaceuticals including biologicals, or medical devices: tonsils and distal ileum. Protein products, food, feed, fertilisers, cosmetics, pharmaceuticals or medical devices prepared using these commodities (unless covered by other Articles in this Chapter) should also not be traded.

2. From cattle that were at the time of slaughter over 30 months of age originating from a country, zone or compartment defined in Article 2.3.13.4., the following commodities, and any commodity contaminated by them, should not be traded for the preparation of food, feed, fertilisers, cosmetics, pharmaceuticals including biologicals, or medical devices: brains, eyes, spinal cord, skull and vertebral column. Protein products, food, feed, fertilisers, cosmetics, pharmaceuticals or medical devices prepared using these commodities (unless covered by other Articles in this Chapter) should also not be traded.
3. From cattle that were at the time of slaughter over 12 months of age originating from a country, zone or compartment defined in Article 2.3.13.5., the following commodities, and any commodity contaminated by them, should not be traded for the preparation of food, feed, fertilisers, cosmetics, pharmaceuticals including biologicals, or medical devices: brains, eyes, spinal cord, skull and vertebral column. Protein products, food, feed, fertilisers, cosmetics, pharmaceuticals or medical devices prepared using these commodities (unless covered by other Articles in this Chapter) should also not be traded.

Article 2.3.13.15.

Veterinary Authorities of importing countries should require:

for gelatine and collagen prepared from bones and intended for food or feed, cosmetics, pharmaceuticals including biologicals, or medical devices

the presentation of an international veterinary certificate attesting that:

1. the commodities came from a country, zone or compartment posing a negligible BSE risk;

OR

2. they originate from a country, zone or compartment posing a controlled BSE risk and are derived from cattle which have passed ante-mortem and post-mortem inspections; and that
  - a. skulls from cattle over 30 months of age at the time of slaughter have been excluded;
  - b. the bones have been subjected to a process which includes all of the following steps:
    - i. degreasing,
    - ii. acid demineralisation,
    - iii. acid or alkaline treatment,
    - iv. filtration,
    - v. sterilisation at >138°C for a minimum of 4 seconds,

or to an equivalent or better process in terms of infectivity reduction (such as high pressure heating);

OR



3. they originate from a country, zone or compartment posing an undetermined BSE risk and are derived from cattle which have passed ante-mortem and post-mortem inspections; and that
  - a. skulls and vertebrae (except tail vertebrae) from cattle over 12 months of age at the time of slaughter have been excluded;
  - b. the bones have been subjected to a process which includes all of the following steps:
    - i. degreasing,
    - ii. acid demineralisation,
    - iii. acid or alkaline treatment,
    - iv. filtration,
    - v. sterilisation at >138°C for a minimum of 4 seconds,

or to an equivalent or better process in terms of infectivity reduction (such as high pressure heating).

Article 2.3.13.16.

Veterinary Authorities of importing countries should require:

for tallow and dicalcium phosphate (other than as defined in Article 2.3.13.1.) intended for food, feed, fertilisers, cosmetics, pharmaceuticals including biologicals, or medical devices

the presentation of an international veterinary certificate attesting that:

1. the commodities came from a country, zone or compartment posing a negligible BSE risk; or
2. they originate from a country, zone or compartment posing a controlled BSE risk, are derived from cattle which have passed ante-mortem and post-mortem inspections, and have not been prepared using the tissues listed in points 1 and 2 of Article 2.3.13.14.

Article 2.3.13.17.

Veterinary Authorities of importing countries should require:

for tallow derivatives (other than those made from protein-free tallow as defined in Article 2.3.13.1.) intended for food, feed, fertilisers, cosmetics, pharmaceuticals including biologicals, or medical devices

the presentation of an international veterinary certificate attesting that:

1. they originate from a country, zone or compartment posing a negligible BSE risk; or
2. they are derived from tallow meeting the conditions referred to in Article 2.3.13.16.; or
3. they have been produced by hydrolysis, saponification or transesterification using high temperature and pressure.